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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|--------------------------------|------------------------|
| 10/527,807 | 03/14/2005 | Keiichi Ohashi | 1009682-000146 | 6390 |
| 21839 7590 05/09/2007 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404 | | | EXAMINER STOKLOSA, JOSEPH A | |
| | | | ART UNIT 3762 | PAPER NUMBER |
| | | | MAIL DATE 05/09/2007 | DELIVERY MODE PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/527,807 | Applicant(s) OHASHI ET AL. | |
| | Examiner Joseph Stoklosa | Art Unit 3762 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-6 and 8-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-6 and 8-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 14 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claims 14 and 17 include the limitation of "some hundreds of microamperes" which is broad and indefinite. Appropriate correction is required wherein a specified range or a range less than a specified amperage is claimed.

4. Claim 1, 4, 19, and 20 recites the limitation "inputs the high-voltage alternating current" in paragraph 5. There is insufficient antecedent basis for this limitation in the claim, and this limitation is not disclosed in the specification.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any

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inventions covered therein were made absent any evidence to the contrary.

Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 4-6, 8-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over PETROFSKY (US 5,048,522) herein Reference A in view of PETROFSKY (US 5,974,342) herein Reference B and in view of Sporer (US 5,387,231).

8. With regards to claim 1, 4, 19-20, Reference A discloses an apparatus that applies high-voltage alternating current (col. 2, line 49-52), a voltage change pattern storing means (col. 7, line 60-65), a voltage change pattern selecting means (col. 12, line 22), and an alternating current generating circuit that generates the voltage based on the selected change in voltage pattern selected (col. 12, line 17), and an alternating current pattern storing means for patterns comprised of a voltage and waveform (col. 8, line 22), a voltage and a frequency, or a voltage, waveform, and a frequency (col. 9, line 5) all of which are programmed and run using the device controller unit (Fig. 1, 20).

9. Reference B teaches that it is known to use a voltage step of 90-110V every second as set forth in Fig. 4. Fig. 4 of Reference B shows a decreasing/increasing step in a time of 0.5 seconds from the V_{\max} of 1-75 volts. With the V_{\max} being set for various applications anywhere from 1-75 volts, using

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50 volts from the range with the increase/decrease of 0.5 seconds provides the disclosed decrease of 100 volts/second.

10. Sporer teaches a high voltage alternating current biased to the negative side and a resulting negative electric field (Col. 9, lines 48-59; Figs. 2 and 3).

Sporer also teaches an embodiment of electrical stimulation that includes the use of stimulation pads. Examiner considers pads to be an electric therapy apparatus and the electrodes to be inherently disposed within the pads (Col. 6, line 33-41).

11. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the system as taught by Reference A, with voltage steps of 90-110V as taught by Reference B, high voltage alternating current biased to the negative side and a resulting negative electric field, and use of stimulation pads as taught by Sporer since such a modifications would provide the system with voltage steps of 90-110V every second for providing shorter treatment times due to faster increases/decreases of the voltage, and to not startle the patient upon initial application of the pulses, high voltage alternating current biased to the negative side and a resulting negative electric field with greater carry-over positive effect from one treatment to the next, stimulation pads to deliver stimulation along with a massage effect.

12. With regard to claim 5 and 6, Reference A discloses that the voltage and current change patterns are not of a rectangular wave pattern (col. 4, line 54; Fig. 2).

13. Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reference A in view of Reference B as applied to the claims 1 and 4 above.

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14. With regards to claims 8-12, Reference A discloses the claimed invention except for the massage unit, rollers, and ion generator. It would have been obvious to one of ordinary skill in the art to modify the system as taught by Reference A in view of Reference B, with a massage unit, rollers and an ion generator since it is known in the art that a massage unit, rollers, and an ion generator is used to provide greater user comfort and create an enjoyable, refreshing effect, to promote recovery from exhaustion.

15. With regards to claims 13-14, 16-17, Reference A in view of Reference B and in view of Sporer discloses the claimed invention except for the desired current and voltage ranges. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system as taught by Reference A in view of Reference B and in view of Sporer, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum workable ranges involves only routine skill in the art [*In re Aller*, 105 USPQ 233] and/or since it has been held that a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corp. of America v. Banner*, 778 F.2d 775, 227 USPQ (Please see MPEP 2144.05).

16. With regards to claim 15 and 18, Examiner interprets the troughs of the alternating waveform gradually increasing and the crests of the waveform gradually decreasing to be indicative of a ramping function which is disclosed by reference A (Col. 6, line 55-59).

Response to Arguments

17. Applicant's arguments with respect to claims 1, 4-6, and 8-20 have been considered but are moot in view of the new ground(s) of rejection necessitated by Applicant's amendment received 4/10/2007.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Stoklosa whose telephone number is

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571-272-1213. The examiner can normally be reached on Monday-Friday 7:30-4:00.

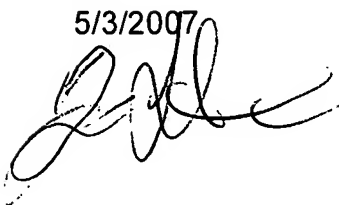
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on 571-272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joseph Stoklosa
Examiner
Art Unit 3762

JS

5/3/2007



GEORGE R. EVANISKO
PRIMARY EXAMINER

5/7/7